

REMARKS

This is a Response to the Office Action mailed December 16, 2009, in which a three (3) month Shortened Statutory Period for Response has been set, due to expire March 16, 2010. Thirty (30) claims, including eight (8) independent claims, were paid for in the application. Claims 1-18 were previously canceled. Claims 19, 25, 31, 37, and 43-46 have been amended. No new matter has been added to the application. No fee for additional claims is due by way of this Amendment. The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090. Claims 19-48 are pending.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 19-48 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the examiner contends that it is unclear what the correcting factor is and how it is used to adjust energy consumption. Office Action mailed December 16, 2009, paragraph 2, page 2. The examiner further contends that a person having ordinary skill in the art would not know how to determine the correcting factor or how to apply the correcting factor to the energy consumption.

We respectfully refer the examiner to the description. The description states that reports are generated that enable benchmarking across different types of facilities. Substitute specification, page 15, lines 1 to 4. Examples of different types of facilities include a hospital ward and a hotel. Id. A user assesses and enters a correcting factor that correlates to the energy intensity of the facility/sub-facility, which may be represented in Watts per square meter (W/m^2). Id. The correcting factor is time and use related. Substitute specification, page 15 lines 11 to 15. One example is 2 core hours. Id. The correcting factor will have either a negative or a positive impact. Id. An example given is if the building has equipment operating in winter it will have a positive impact as less heating from the building systems will be needed. Id. In summer however it will have a negative impact from for example additional cooling capacity from the chillers. Id.

As is readily understood from the specification and drawings, skilled users calculate correcting factors and enter such into a computer system. The computer system applies the correcting factors to energy intensity values for respective facilities to produce corrected energy intensity values. The corrected energy intensity values allow a facility's energy usage to be readily compared with energy usage of other facilities, even different types of facilities, as part of a reporting process. In the example given in the specification, a hospital ward is one type of facility and a hotel is another type of facility. These two facilities will have different energy intensities at different times of the day and days of the year. A building that has equipment operating in winter will therefore have a correcting factor applied to it to reduce the energy intensity over winter. This reflects the fact that less heating will be needed from the building systems during winter. Furthermore, in summer the correcting factor will have a negative impact in that it will increase the energy intensity. This may be because additional cooling capacity from the chillers or air conditioners is required over summer due to the impact of the equipment ordinarily operating. Thus, it is clear that the correcting factors are values which correlate or normalize the energy usage calculations between facilities, even different types of facilities, as a function of time.

Respectfully, enablement does not require specifically describing individual correcting factors for individual facilities or precise methods of calculating such. Based on the teachings in the specification, one of ordinary skill in the art will readily be capable of assigning correcting factors to a facility using a knowledge of a given facility's purpose, equipment, size, insulation, occupancy, past usage, operating schedule, daily and seasonal patterns, etc., as well as the skilled user's generalized knowledge of the various factors that affect energy usage and energy usage patterns in various types of facilities. Projecting or estimating energy usage is well within the capabilities of those of ordinary skill in the art. Developing specific correcting factors that correlate energy intensities would likewise be within the capabilities of one of ordinary skill in the art in light of the teachings of the present application. Further, applying the correcting factors to produce corrected energy intensity values for various facilities is also readily apparent from the description of the present application. Such may, for example reduce the amount of energy required during winter months by an amount that compensates for the heat produced by

certain equipment which will warm the facility, yet increases the amount of energy required during summer months to compensate for added cooling required to offset the heat produced by the equipment. Such may of course, take into account changes in load on the equipment as well. Thus, the specification enables one of ordinary skill in the art to define and apply correction factors, and consequently to practice the claimed invention without undue experimentation.

Claims 19-48 were also rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

With respect to claims 19 and 25, the examiner states that claims contain subject matter which was not described sufficiently to reasonably convey that the inventors had possession of the claimed invention at the time the application was filed. Office Action mailed December 16, 2009, paragraph 3, page 3.

In particular, with respect to claims 19 and 25, the examiner states that “determining by at least one processor of the utility usage evaluation system respective correcting factors, the correcting factors correlating to the calculated energy intensity or intensities” is not sufficiently supported to show possession. Office Action mailed December 16, 2009, paragraph 3a, page 3.

Applicants respectfully believe that such is adequately supported to demonstrate possession.¹ In particular, the specification states:

It is also envisaged that reports be generated enabling benchmarking across different types of facilities, for example comparing hospital ward with a hotel. The user is relied on to assess and enter a correcting factor that correlates to the energy intensity of the facility/sub-facility in watts per square meter.

Sub. Specification, page 15, lines 1-5.

¹ The test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed. *Ariad Pharmaceuticals, Inc. v. Eli Lilly And Co.*, 2008-1248, page 24 (Fed. Cir. 2009).

Although the correcting factors are initially calculated by a user who enters such in to the usage evaluation system, the usage evaluation system must determine which of the respective correcting factors to apply in determining the corrected energy intensity values. Thus, Applicants respectfully assert that “determining by at least one processor of the utility usage evaluation system respective correcting factors” is adequately supported to demonstrate possession. Nevertheless, Applicants amend the claims to remove reference to the processor in that particular limitation.

With respect to claim 19, the examiner states that “comparing by at least one processor of the utility usage evaluation system the corrected utility consumption of one or more of the facilities with the utility consumption for respective benchmark standards automatically generated from dissimilar facilities” is not sufficiently supported to show possession. In particular, it appears that the examiner’s concern is with the term “dissimilar” when describing the facilities. Office Action mailed December 16, 2009, paragraph 3b, pages 3-4.

Applicants respectfully believe that such is adequately supported to demonstrate possession. In particular, the specification states:

It is also envisaged that reports be generated enabling benchmarking across different types of facilities, for example comparing a hospital ward with a hotel.

Sub. Specification, page 15, lines 1-3.

A benchmark database 280 stores utility consumption data from several different types of facilities, processes, and mobile assets belonging to an organization and a utility or energy consumption comparer 290 compares consumption data relating to client facilities, processes and/or mobile assets from 20 the client data store 260 and the utility or energy consumption calculator 270 with data stored in the benchmark database 280.

Sub. Specification, page 6, lines 16 to 21.

Dissimilar is defined as being “unlike” or “not alike or similar” or “different.” Thus, the term “dissimilar” appears supported by the description of benchmarking across “different types of facilities” in the specification. Nevertheless, Applicants amend the claims to read “different types of facilities.”

With respect to claim 25, the examiner appears to also be concerned with the use of the term “dissimilar” to modify processes. Office Action mailed December 16, 2009, paragraph 3c, page 4.

As explained above, Applicants respectfully believe that such is adequately supported by reference to “different types of processes” as to demonstrate possession. Nevertheless, Applicants amend the claims to read “different types of processes.”

With respect to claim 31, the examiner appears to be concerned with the recitation “a utility consumption calculator configured to . . . determine respective correcting factors.” Office Action mailed December 16, 2009, paragraph 3d, page 4. Also with respect to claim 31, the examiner again appears to be concerned with the use of the term “dissimilar. Office Action mailed December 16, 2009, paragraph 3d, page 5.

As explained above, Applicants respectfully believe that a utility consumption calculator configured to determine respective correcting factors” is adequately supported, since the description describes that a user enters such correcting factors into the evaluation system, and since the utility consumption calculator must determine which respective correcting factors to apply to the energy intensity values of respective facilities or sub-facilities. Also as explained above, Applicants respectfully believe that the term “dissimilar” is adequately supported by reference to “different types of facilities.” Nevertheless, to advance prosecution, Applicants amend the claims accordingly.

With respect to claim 37, the examiner appears to have concerns with the term “dissimilar” as used in respect to processes. Office Action mailed December 16, 2009, paragraph 3e, pages 5-6. Again, Applicants respectfully believe there is adequate support in the description to show possession of the invention (*e.g.*, different types of processes), but nevertheless amends the claims to remove the basis for the rejection.

With respect to claims 43 and 44, the examiner appears to have concerns with the recitation “determining respective correcting factors . . . correlating to the calculated energy

intensity or intensities.” Office Action mailed December 16, 2009, paragraph 3f, page 6. As explained above, Applicants respectfully believe that there is sufficient support for a processor executing instructions that cause the processor to determine respective correcting factors. In particular, the description makes clear that a processor of a usage evaluation system must determine which correcting factors to apply to the respective facilities or sub-facilities. Nevertheless, the claims have been amended to remove the basis for the rejection.

With respect to claims 43 and 44, the examiner again appears to have concerns over the term “dissimilar.” Office Action mailed December 16, 2009, paragraphs 3g and 3h, pages 6 and 7. As explained above, Applicants believe that there is sufficient support (*e.g.*, different types of facilities, different types of processes), to demonstrate possession. Nevertheless, Applicants amend the claim to advance prosecution.

With respect to claims 45 and 46, the examiner appears to have concerns with the recitation “means for determining respective correcting factors . . . correlating to the calculated energy intensity or intensities.” Office Action mailed December 16, 2009, paragraph 3i, page 7. As explained above, Applicants respectfully believe that there is sufficient support for a processor or evaluation system that determine correcting factors, particularly determining correcting factors to apply to the respective facilities or sub-facilities. Nevertheless, the claims have been amended to remove the basis for the rejection.

With respect to claims 45 and 46, the examiner again appears to have concerns over the term “dissimilar.” Office Action mailed December 16, 2009, paragraphs 3j and 3k, pages 7 and 8. As explained above, Applicants believe that there is sufficient support (*e.g.*, different types of facilities and/ different types of processes), to demonstrate possession. Nevertheless, Applicants amend the claim to advance prosecution.

Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 19-48 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which the applicants regard as their invention.

In particular, the examiner contends that “the correcting factor is undefined and therefore vague and indefinite” and that “how the correcting factor is applied to the utility consumption is not clear.” Office Action mailed December 16, 2009, paragraph, page 8.

The term “correcting factor” must be interpreted as such would be understood by those of ordinary skill in the art, as informed by the teachings contained in the specification and figures. The term “correcting” is the transitive verb of the word correct, which means to make or set right, or to alter or adjust so as to bring to some standard or required condition. Merriam-Webster, online. The term “factor” means one that actively contributes to the product of a result, any number of symbols that when multiplied together form a product, or a quantity by which a given quantity is multiplied or divided in order to indicate a different in measurement. Merriam-Webster, online search. As noted above, the present application provides description and examples of correcting factors being used to correlate or normalize energy usage calculations between facilities, even between facilities of different types (*e.g.*, hospital and hotel). The correcting factors take into account both time and use.

In light of such, both the term “correcting factor” and its application to utility consumption appear sufficiently clear as understood by those of ordinary skill in the art to serve the notice function of 35 U.S.C. 112, second paragraph.

Rejections Under 35 U.S.C. § 103

Claims 19-21, 25, 26, 31-33, 37-39, and 43-48 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5,566,084 issued to Cmar (hereinafter Cmar).

Cmar is directed to identifying patterns of electric energy effects and proposed changes, to conserve energy. Cmar, title, abstract. Cmar teaches analyzing electric billing data for a facility, isolating use and temperature dependent consumption and demand, and disaggregating the bills into component end uses. Cmar, col. 5, lines 60-67. Patterns describing

existing operations for the facility are developed, and used to predict effects of change which might be made to the facility. Id. Such allows analysis based on limited defining data. Cmar, col. 3, lines 25-35.

The examiner contends that Cmar teaches such, replying on passages at col. 7, lines 43-56 and col. 8, lines 31-41. The cited passage at col. 7, lines 43-56 of Cmar refer to a base year normalization procedure to maintain accuracy of savings calculation. The cited passage at col. 8, lines 31-41 refers to establishing default values. In both instances the references are made with respect to comparing performance of a single facility, from one time to another. Neither instance refers to normalizing between two different facilities, let alone different facilities of different types. Nor does such teach, or even suggest, *comparing the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.*

Claim 19 recites, *inter alia*, “*comparing by at least one processor of the utility usage evaluation system the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.*” (Emphasis added.)

The examiner contends that Cmar teaches such, relying on passages at col. 2, lines 3-15 and col. 2, line 64-col. 3, line 6. The passage at col. 2, lines 3-15 describes the development of rules forming an expert system regarding how to disaggregate an electric bill. These rules for disaggregating a bill are developed by auditing hundreds of buildings, though each building does not have to have a complete audit. Although hundreds of buildings are audited and this information used to develop rules for the expert system, there is no teaching that these buildings are different types of facilities. Thus, this passage does not teach or suggest *comparing by at least one processor of the utility usage evaluation system the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.*

The passage at column 2 lines 64 to column 3 line 6 describes a resulting answer that can be compared with estimates. The actual KW savings allows refinement of the estimate of hours of operation. When this is performed a few dozen times, enough significant data can be

gathered to predict what is happening in a building for which only the bills, its use and the square footage is available. This also provides the ability accurately to estimate the energy conservation potential. Such however, does not teach or suggest *comparing* by at least one processor of the utility usage evaluation system *the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities*.

Claim 25 recites, *inter alia*, “*comparing* by at least one processor of the utility usage evaluation system *the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes*.”

The examiner alleges that Cmar teaches such, relying on passages at col. 2, lines 3-15 and col. 2, line 64-col. 3, line 6. As explained above in reference to claim 19, Cmar teaches comparing a single facility over time, including before and after retrofits. Hence, Cmar does not teach or even suggest *comparing* by at least one processor of the utility usage evaluation system *the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes*.

Claim 31 recites, *inter alia*, “a utility consumption comparer configured to *compare the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities*.”

The examiner alleges Cmar teaches such relying on the same passages discussed above. As explained above, such passages do not teach a utility consumption comparer configured to compare the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.

Claim 37 recites, *inter alia*, “a utility consumption comparer configured to compare the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes.”

The examiner alleges Cmar teaches such relying on the same passages discussed above. As explained above, such passages do not teach a utility consumption comparer configured to compare the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes.

Claim 43 recites, *inter alia*, “comparing the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.”

The examiner alleges Cmar teaches such relying on the same passages discussed above. As explained above, such passages do not teach comparing the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.

Claim 44 recites, *inter alia*, “comparing by the at least one processor the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes.”

The examiner alleges Cmar teaches such relying on the same passages discussed above. As explained above, such passages do not teach comparing by the at least one processor the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes.

Claim 45 recites, *inter alia*, “means for comparing the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.”

The examiner alleges Cmar teaches such relying on the same passages discussed above. As explained above, such passages do not teach means for comparing the corrected utility consumption of one or more of the facilities with the utility consumption of respective benchmark standards automatically generated from different types of facilities.

Claim 46 recites, *inter alia*, “means for comparing the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes.”

The examiner alleges Cmar teaches such relying on the same passages discussed above. As explained above, such passages do not teach means for comparing the corrected utility consumption of one or more of the processes with the utility consumption of respective benchmark standards automatically generated from different types of processes.

Claims 22-24, 28-30, 34-36, and 40-42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cmar in view of US Patent Publication No. 2002/0178047 to Or et al. (hereinafter “Or”).

Or is directed to monitoring energy usage at a first facility, establishing a historical base-line energy usage at the first facility, comparing historical base-line energy usage to current energy usage at the first facility, determining excessive energy usage based on the comparison of historical base-line energy usage to current energy usage at the first facility, reporting and providing an electronic purchase ordering link to perform corrective action. Or, paras. 0006-0008.

As such, Or does not appear to supply the teachings missing from Cmar, as described above. Thus, Cmar and Or alone or in combination, do not teach each limitation of independent claims 19, 25, 31, 37, or 43-46, and hence do not teach or suggest each limitation of claims 22-24, 28-30, 34-36, and 40-42 which depend from those claims, directly or indirectly.

Conclusion

Applicants respectfully submit that the pending claims are in condition for allowance. Any remarks in support of patentability of one claim should not be imputed to any other claim, even if similar terminology is used. Any remarks referring to only a portion of a claim should not be understood to base patentability on that portion; rather, patentability must rest on each claim taken as a whole. A number of clarifying amendments have also been made to the above claim set. Applicants do not acquiesce to each of the Examiner's rejections and to each of the Examiner's assertions regarding what the cited references show or teach, even if not expressly discussed herein. Although changes to the claims have been made, no acquiescence or estoppel is or should be implied thereby; such amendments are made only to expedite prosecution of the present application and are without prejudice to the presentation or assertion, in the future, of claims relating to the same or similar subject matter.

If the undersigned attorney has overlooked a relevant teaching in any of the references, the Examiner is requested to point out specifically where such teaching may be found. In light of the above amendments and remarks, Applicants respectfully submit that all pending claims are allowable. Applicants, therefore, respectfully request that the Examiner reconsider this application and timely allow all pending claims. The Examiner is encouraged to contact the undersigned by telephone to discuss the above and any other distinctions between the claims and the applied references, if desired. If the Examiner notes any informalities in the claims, the Examiner is encouraged to contact the undersigned by telephone to expediently correct such informalities.

Respectfully submitted,
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